

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : **2000-285975**

(43)Date of publication of application : **13.10.2000**

(51)Int.Cl.

H01M 14/00

H01L 31/04

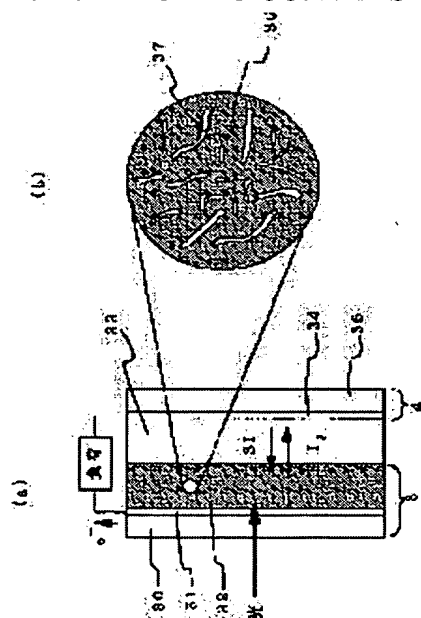
(21)Application number : **11-090052**

(71)Applicant : **AISIN SEIKI CO LTD**

(22)Date of filing : **30.03.1999**

(72)Inventor : **TOYODA TATSUO**

### (54) SEMICONDUCTOR FOR PHOTOELECTRIC CONVERSION AND PHOTOELECTRIC CONVERSION ELEMENT



(57)Abstract:

**PROBLEM TO BE SOLVED:** To enhance photoelectric conversion efficiency by efficiently collecting electrons injected from coloring agent excited with light energy and increasing photoelectric current.

**SOLUTION:** A photoelectric transfer semiconductor 32 contains a metal phase 37 in at least one of the surface of a semiconductor particle and a space between semiconductor particles in the photoelectric conversion semiconductor 32 comprising a porous layer made from aggregated semiconductor particles and pigment, a photoelectric conversion semiconductor 42 comprises a porous layer made from aggregated metal particles 46 whose surfaces are made semi-conductive and a coloring agent, and the photoelectric conversion semiconductors 32, 42 are formed on conductive substrates 30, 31.

### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other

than the examiner's decision of rejection or  
application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's  
decision of rejection]

[Date of requesting appeal against  
examiner's decision of rejection]

[Date of extinction of right]